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FULL ESTIMATED COST

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FILE 'USPATFULL' ENTERED AT 13:14:12 ON 13 NOV 2000 CA INDEXING COPYRIGHT (C) 2000 AMERICAN CHEMICAL SOCIETY (ACS)

=> s chemokine (s) peptide (s) inhibitor

202 CHEMOKINE (S) PEPTIDE (S) INHIBITOR

=> s chemokine (s) peptide (s) inhibitor (s) mcp

36 CHEMOKINE (S) PEPTIDE (S) INHIBITOR (S) MCP

=> dup rem 12

PROCESSING COMPLETED FOR L2 19 DUP REM L2 (17 DUPLICATES REMOVED)

=> d 13 total ibib kwic

ANSWER 1 OF 19 USPATFULL

ACCESSION NUMBER:

2000:146395 USPATFULL

TITLE:

INVENTOR(S):

Cyclic amine modulators of chemokine receptor activity Caldwell, Charles G., Scotch Plains, NJ, United States

Maccoss, Malcolm, Freehold, NJ, United States Finke, Paul E., Milltown, NJ, United States

Mills, Sander G., Scotch Plains, NJ, United States

Oates, Bryan, Wayne, NJ, United States

Kothandaraman, Shankaran, Kendall Park, NJ, United

States

Kim, Dooseop, Westfield, NJ, United States

Wang, Liping, Plainsboro, NJ, United States Merck & Co., Inc., Rahway, NJ, United States (U.S.

PATENT ASSIGNEE(S): corporation)

> NUMBER DATE

PATENT INFORMATION:

US 6140349

20001031

APPLICATION INFO.: US 1999-241486 19990201 (9)

NUMBER DATE _____

US 1998-73446 19980202 (60) PRIORITY INFORMATION:

PRIORITI INC...

DOCUMENT TYPE:

PRIMARY EXAMINER:

Chang, Ceila

Thies, J. Eric; Rose, David L.

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 3199 LINE COUNT:

The peptides eotaxin, RANTES, MIP-1.alpha., MIP-1.beta., SUMM

MCP-1, and MCP-3 are known to bind to

chemokine receptors. As noted above, the inhibitors of

HIV-1 replication present in supernatants of CD8+ T cells have been characterized as the .beta.-chemokines RANTES, MIP-1.alpha. and MIP-1.beta.. PCT Patent Publication WO 97/10211 and EPO Patent Publication EP 0,673,928 disclose certain piperidines as tachykinin antagonists. PCT Patent Publications WO 97/24325 and WO 97/44329, and Japan Patent Publication JP 09,249,566 disclose certain compounds as

chemokine antagonists.

ANSWER 2 OF 19 USPATFULL

2000:142393 USPATFULL ACCESSION NUMBER:

Cyclic amine modulations of chemokine receptor TITLE:

activity

Caldwell, Charles G., Scotch Plains, NJ, United States INVENTOR(S):

Finke, Paul E., Milltown, NJ, United States Maccoss, Malcolm, Freehold, NJ, United States Meurer, Laura C., Scotch Plains, NJ, United States Mills, Sander G., Scotch Plains, NJ, United States

Oates, Bryan, Wayne, NJ, United States

Merck & Co., Inc., Rahway, NJ, United States (U.S. PATENT ASSIGNEE(S):

corporation)

DATE NUMBER -----

US 6136827 20001024 US 1998-120010 19980721 (9) PATENT INFORMATION: APPLICATION INFO.:

> NUMBER DATE _____

PRIORITY INFORMATION: US 1997-53754 19970725 (60)

PRIMARY EXAMINER: Chang C

PRIMARY EXAMINER: Chang, Ceila LEGAL REPRESENTATIVE: Thies, J. Eric; Rose, David L.

NUMBER OF CLAIMS: 20 1 EXEMPLARY CLAIM: 3161 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The peptides eotaxin, RANTES, MIP-1.alpha., MIP-1.beta.,

MCP-1, and MCP-3 are known to bind to

chemokine receptors. As noted above, the inhibitors of

HIV-1 replication present in supernatants of CD8+ T cells have been characterized as the .beta.-chemokines RANTES, MIP-1.alpha.

and MIP-1.beta.. PCT Patent Publication WO 97/10211 and EPO Patent Publication EP 0,673,928 disclose certain piperidines as tachykinin. .

ANSWER 3 OF 19 USPATFULL

2000:128351 USPATFULL ACCESSION NUMBER:

3,3-disubstituted piperidines as modulators of TITLE:

chemokine receptor activity

MacCoss, Malcolm, Freehold, NJ, United States INVENTOR(S): Mills, Sander G., Scotch Plains, NJ, United States

Merck & Co., Inc., Rahway, NJ, United States (U.S. PATENT ASSIGNEE(S):

```
NUMBER DATE
                        ______
                       US 6124319 20000926
US 1998-9488 19980120
PATENT INFORMATION:
                                        19980120 (9)
APPLICATION INFO .:
                        Utility
DOCUMENT TYPE:
PRIMARY EXAMINER:
                       Travers, Russell
                       Thies, J. Eric; Rose, David L.
LEGAL REPRESENTATIVE:
NUMBER OF CLAIMS:
                        10
EXEMPLARY CLAIM:
                        1
LINE COUNT:
                        1901
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The peptides eotaxin, RANTES, MIP-1-60, MIP-1.beta.,
SUMM
     MCP-1, and MCP-3 are known to bind to
     chemokine receptors. As noted above, the inhibitors of
       HIV-1 replication present in supernatants of CD8+ T cells have been
       characterized as the .beta.-chemokines RANTES, MIP-1.alpha.
       and MIP-1.beta.. U.S. Pat. Nos. 5,340,822, 5,350,852, 5,434,158,
       5,559,132, 5,589,489, and 5,635,510 and PCT Patent Publication WO
       95/05377.
     ANSWER 4 OF 19 USPATFULL
                        2000:4806 USPATFULL
ACCESSION NUMBER:
                        Spiro-substituted azacycles as modulators of chemokine
TITLE:
                        receptor activity
                        Mills, Sander G., Scotch Plains, NJ, United States Maccoss, Malcolm, Freehold, NJ, United States
INVENTOR(S):
                        Springer, Martin S., Westfield, NJ, United States
                        Merck & Co., Inc., Rahway, NJ, United States (U.S.
 PATENT ASSIGNEE(S):
                        corporation)
                                          DATE
                             NUMBER
                         ______
                        US 6013644 20000111
 PATENT INFORMATION:
                         US 1997-989940 19971212 (8)
 APPLICATION INFO.:
                        Utility
 DOCUMENT TYPE:
 PRIMARY EXAMINER:
                        Krass, Frederick
 LEGAL REPRESENTATIVE: Thies, J. Eric; Rose, David L. NUMBER OF CLAIMS: 9
 NUMBER OF CLAIMS:
                        1
 EXEMPLARY CLAIM:
                        2845
 LINE COUNT:
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The peptides eotaxin, RANTES, MIP-1.alpha., MIP-1.beta.,
      MCP-1, and MCP-3 are known to bind to
      chemokine receptors. As noted above, the inhibitors of
        HIV-1 replication present in supernatants of CD8+ T cells have been
        characterized as the .beta.-chemokines RANTES, MIP-1.alpha.
        and MIP-1.beta.. PCT Patent Publications WO 94/17045 (published Aug. 4,
        1994), WO 94/29309 (published Dec. 22, 1994), and.
                                                          DUPLICATE 1
      ANSWER 5 OF 19 MEDLINE
 ACCESSION NUMBER: 2000405934
                                    MEDLINE
                     20305499
 DOCUMENT NUMBER:
                     Angiotensin III increases MCP-1 and activates NF-kappaB
 TITLE:
                     AP-1 in cultured mesangial and mononuclear cells.
  and
                     Ruiz-Ortega M; Lorenzo O; Egido J
  AUTHOR:
                     Fundacion Jimenez Diaz, Universidad Autonoma, Madrid,
  CORPORATE SOURCE:
                      Spain.
                     KIDNEY INTERNATIONAL, (2000 Jun) 57 (6) 2285-98.
  SOURCE:
                      Journal code: KVB. ISSN: 0085-2538.
                     United States
  PUB. COUNTRY:
                      Journal; Article; (JOURNAL ARTICLE)
                     English
  LANGUAGE:
```

Priority Journals

FILE SEGMENT:

200010 ENTRY MONTH: 20001004 . . of renal diseases. Angiotensin II (Ang II) participates in ENTRY WEEK: inflammatory cell infiltration in the kidney. However, the influence of other peptides of the renin-angiotensin system, such as the N-terminal Ang II degradation product Ang III, has not been addressed. METHODS: In. . . cultured renal and mononuclear cells, we investigated whether Ang III is involved in monocyte recruitment through the regulation of the chemokine, monocyte chemoattractant protein-1 (MCP-1; Northern blot, Western blot, immunofluorescence, and chemotaxis), and the activation of transcription factors, nuclear factor kappaB (NF-kappaB) and activating protein-1 (AP-1; electrophoretic mobility shift assay). RESULTS: In cultured rat mesangial and mononuclear cells, Ang III increased MCP-1 gene expression and protein levels. Supernatants from Ang III-treated mesangial cells showed chemoattractant activity for monocytes, which was partially inhibited by increased the addition of anti-MCP-1 antibody. Ang III elicited a rapid NF-kappaB activation (8-fold, after 30 min), showing a kinetics and intensity similar to that. . . and disappearance of cytosolic IkappaB. Ang III also activated AP-1 (5-fold, after 18 h), while SP-1 was unchanged. Two NF-kappaB inhibitors abolished the Ang III-induced MCP-1 mRNA expression, suggesting that overexpression of this chemokine is mediated, at least in part, by NF-kappaB activation. CONCLUSIONS: Ang III activates the transcription factors NF-kappaB and AP-1 and increases the expression of related genes, such as MCP-1. Our study describes a novel and potent proinflammatory action of this Ang degradation product, expanding the present view of the. ANSWER 6 OF 19 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V. ACCESSION NUMBER: 2000362900 EMBASE Protective effect of Rolipram in experimental autoimmune neuritis: Protection is associated with down-regulation of TITLE: IFN-.gamma. and inflammatory chemokines as well as up-regulation of IL-4 in peripheral nervous system. Abbas N.; Zou L.-P.; Pelidou S.-H.; Winblad B.; Zhu J. J. Zhu, Division of Geriatric Medicine (B84), Karolinska AUTHOR: CORPORATE SOURCE: Institute, Huddinge Hospital, S-141 86 Huddinge, Sweden. Jie.Zhu@neurotec.ki.se Autoimmunity, (2000) 32/2 (93-99). SOURCE: Refs: 26 ISSN: 0891-6934 CODEN: AUIMEI United Kingdom COUNTRY: Journal; Article DOCUMENT TYPE: Pharmacology 030 FILE SEGMENT: Drug Literature Index 037 Neurology and Neurosurgery 800 Immunology, Serology and Transplantation 026 English LANGUAGE: SUMMARY LANGUAGE: English Rolipram, a phosphodiesterase type 4 inhibitor, is reported to have anti-inflammatory effects. It can markedly downregulate antigen-driven T cell proliferation and suppress TNF-.alpha. and TNF-.beta. production. . . IFN-.gamma. and TNF-.alpha. production. Here

we report that EAN induced in Lewis rats by inoculation with the PNS P2 protein **peptide** 57-81 and Freund's complete adjuvant (FCA), was strongly suppressed by Rolipram administered twice daily

intraperitoneally from day 9 post immunization. . . of clinical EAN to day 18 p.i. This clinical effect was associated with dose-dependent down-regulated production of IFN-.gamma. and the **chemokines** macrophage inflammatory protein-1.alpha. (MIP-1.alpha.), MIP-2 and monocyte chemotactic protein-1 (MCP-1) as well as up-regulated IL-4

production in sciatic nerve sections from Rolipram-treated EAN rats at maximum of clinical EAN, i.e.. . .

ANSWER 7 OF 19 USPATFULL

1999:163409 USPATFULL ACCESSION NUMBER:

Functional expression of mammalian adenylyl cyclase in TITLE:

yeast

Broach, James R., Princeton, NJ, United States INVENTOR(S):

Manfredi, John P., Ossining, NY, United States Trueheart, Joshua, Nyack, NY, United States Cadus Pharmaceutical Corporation, Tarrytown, NY,

PATENT ASSIGNEE(S):

United

States (U.S. corporation)

	NUMBER	DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 6001553 WO 9530012 US 1997-732218 WO 1995-US5149	19970114	(8) PCT 371 date PCT 102(e) date
	بمناها والما	nart of Sa	r No US 1994-233

Continuation-in-part of Ser. No. US 1994-233700, filed RELATED APPLN. INFO.:

on 26 Apr 1994, now abandoned

Utility DOCUMENT TYPE:

Wax, Robert A. PRIMARY EXAMINER:

LEGAL REPRESENTATIVE: Lahive & Cockfield LLP; DeConti, Jr., Giulio A.;

Lauro,

Peter C.

83 NUMBER OF CLAIMS: EXEMPLARY CLAIM:

3 Drawing Figure(s); 3 Drawing Page(s) NUMBER OF DRAWINGS:

4954 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention may be used to identify inhibitors or activators of many mammalian receptors, including but not limited to, receptor tyrosine kinases and cytokine receptors (such as those for IL-3, IL-5, GM-CSF, M-CSF and EPO etc.), G protein-coupled

chemokine receptors (such as RANTES, MCP-3,

MCP-1, MIP-1.alpha. and IL-8 receptor), growth factor receptors (such as EGFR and PDGFR etc.), and multi-subunit immune recognition receptors also known. . . as MIRRs (such as Fc.epsilon.RI, and Fc.gamma.RII etc.). Further receptors useful in the current invention include the G protein-coupled C5a peptide receptor, the thrombin peptide receptor (PAR1) and its homolog PAR2, formyl

peptide and bradykinin receptors, muscarinic receptors, adrenergic receptors, melatonin, galanin, glucagon and orphan receptors and transporter proteins such as the multidrug. .

ANSWER 8 OF 19 USPATFULL

1999:121364 USPATFULL ACCESSION NUMBER:

Spiro-substituted azacycles as modulators of chemokine TITLE:

receptor activity

Mills, Sander G., Scotch Plains, NJ, United States INVENTOR(S):

Maccoss, Malcolm, Freehold, NJ, United States Springer, Martin S., Westfield, NJ, United States

Merck & Co., Inc., Rahway, NJ, United States (U.S. PATENT ASSIGNEE(S):

corporation)

	NUMBER	DATE	
PAIRINI INCOMMITTION.	5 5962462 5 1997-989947	19991005 19971212	(8)

DATE NUMBER

```
19961213 (60)
                       US 1996-32735
PRIORITY INFORMATION:
                                          19961220 (60)
                       US 1996-33558
                       Utility
DOCUMENT TYPE:
                       Dees, Jose G.
Oazi, Sabiha N.
PRIMARY EXAMINER:
ASSISTANT EXAMINER:
                       Thies, J. Eric; Rose, David L.
LEGAL REPRESENTATIVE:
                        10
NUMBER OF CLAIMS:
                        1
EXEMPLARY CLAIM:
                        6786
LINE COUNT:
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The peptides eotaxin, RANTES, MIP-1.alpha., MIP-1.beta.,
     MCP-1, and MCP-3 are known to bind to
     chemokine receptors. As noted above, the inhibitors of
       HIV-1 replication present in supernatants of CD8+ T cells have been
       characterized as the .beta.-chemokines RANTES, MIP-1.alpha.
       and MIP-1.beta.. PCT Patent Publications WO 94/17045 (published Aug. 4,
       1994), WO 94/29309 (published Dec. 22, 1994), and.
     ANSWER 9 OF 19 USPATFULL
                        1999:75632 USPATFULL
ACCESSION NUMBER:
                        Substituted aminoquinolines as modulators of chemokine
TITLE:
                        receptor activity
                        Hagmann, William K., Westfield, NJ, United States
                        Springer, Martin S., Westfield, NJ, United States
INVENTOR(S):
                        Merck & Co., Inc., Rahway, NJ, United States (U.S.
 PATENT ASSIGNEE(S):
                        corporation)
                             NUMBER
                                          DATE
                        _____
                        US 5919776 19990706
 PATENT INFORMATION:
                        US 1997-993494 19971218 (8)
 APPLICATION INFO .:
                        Utility
 DOCUMENT TYPE:
                       Mach, D. Margaret M.
 PRIMARY EXAMINER:
 LEGAL REPRESENTATIVE: Thies, J. Eric; Rose, David L.
                        12
 NUMBER OF CLAIMS:
 EXEMPLARY CLAIM:
                        1
                         1808
 LINE COUNT:
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
        The peptides eotaxin, RANTES, MIP-1.alpha., MIP-1.beta.,
 SUMM
      MCP-1, and MCP-3 are known to bind to
      chemokine receptors. As noted above, the inhibitors of
        HIV-1 replication present in supernatants of CD8+ T cells have been
        characterized as the .beta.-chemokines RANTES, MIP-1.alpha.
        and MIP-1.beta.. Certain substituted aminoquinoline derivatives have
        been described as inhibitors of C5a receptor binding (Lanza,
        et al., J. Med. Chem., 35, 252-258 (1992)).
                                                         DUPLICATE 2
      ANSWER 10 OF 19 MEDLINE
                                    MEDLINE
 ACCESSION NUMBER: 1999272411
                     99272411
                     Monocyte arrest and transmigration on inflamed endothelium
  DOCUMENT NUMBER:
                     in shear flow is inhibited by adenovirus-mediated gene
  TITLE:
                     transfer of IkappaB-alpha.
                     Weber K S; Draude G; Erl W; de Martin R; Weber C
  AUTHOR:
                     Institut fur Prophylaxe und Epidemiologie der
  CORPORATE SOURCE:
                     Kreislaufkrankheiten, Ludwig-Maximilians Universitat,
                     Munchen, Germany.. kim.weber@klp.med.uni-muenchen.de
                      BLOOD, (1999 Jun 1) 93 (11) 3685-93.
  SOURCE:
                      Journal code: A8G. ISSN: 0006-4971.
                      United States
  PUB. COUNTRY:
                     Journal; Article; (JOURNAL ARTICLE)
                     Abridged Index Medicus Journals; Priority Journals; Cancer
                     English
  LANGUAGE:
```

FILE SEGMENT:

ENTRY MONTH:

ENTRY WEEK:

Journals 199908

19990804

Mobilization of nuclear factor-kappaB (NF-kappaB) activates transcription of genes encoding endothelial adhesion molecules and chemokines AB that contribute to monocyte infiltration critical in atherogenesis. Inhibition of NF-kappaB has been achieved by pharmacological and genetic approaches; however, monocyte interactions with activated endothelium in shear flow following gene transfer of the NF-kappaB inhibitor IkappaB-alpha have not been studied. We found that overexpression of IkappaB-alpha in endothelial cells using a recombinant adenovirus prevented tumor. . . molecule-1 (VCAM-1), intercellular adhesion molecule-1 (ICAM-1), and E-selectin mRNA and surface protein expression and the upregulation of transcripts for the chemokines monocyte chemoattractant protein 1 (MCP-1) and growth-related activity-alpha (GRO-alpha) by TNF-alpha. This was associated with a reduction in endothelial MCP-1 secretion and GRO-alpha immobilization. Adhesion assays under physiological shear flow conditions showed that firm arrest, spreading, and transmigration of monocytes on TNF-alpha-activated endothelium was markedly inhibited by IkappaB-alpha overexpression. Inhibition with monoclonal antibodies and peptide antagonists inferred that this was due to reduced expression of Ig integrin ligand as well as of chemokines specifically involved in these events. In contrast, rolling of monocytes was increased by IkappaB-alpha transfer and was partly mediated by.

ANSWER 11 OF 19 MEDLINE L3

DUPLICATE 3

MEDLINE ACCESSION NUMBER: 1999289324

DOCUMENT NUMBER: 99289324

Identification of oligopeptide sequences which inhibit TITLE:

migration induced by a wide range of chemokines.

Reckless J; Grainger D J AUTHOR:

Department of Medicine, University of Cambridge, CORPORATE SOURCE:

Addenbrookes Hospital, Box 157, Hills Road, Cambridge CB2

200, UK.. jr219@mole.bio.cam.ac.uk

BIOCHEMICAL JOURNAL, (1999 Jun 15) 340 (Pt 3) 803-11. SOURCE:

Journal code: 9YO. ISSN: 0264-6021.

ENGLAND: United Kingdom PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

Priority Journals; Cancer Journals FILE SEGMENT:

199910 ENTRY MONTH: 19991001 ENTRY WEEK:

а

We have identified an amino acid sequence, termed peptide 3, corresponding to amino acids 51-62 of the mature human monocyte chemoattractant protein-1 (MCP-1), which inhibits human mononuclear-cell and THP-1-cell migration induced by a wide range of chemokines. For example, peptide 3 inhibited MCP -1-induced THP-1 migration in a transwell assay with an ED50 of approx. 8 microM. Peptide 3 binds directly to THP-1 cells with an association constant of approx. 10 microM, and is therefore likely to be

direct receptor antagonist for CC and CXC chemokine receptors. By performing a structure-function analysis of this peptide, we have identified a sequence variant that shows an approx. 3-4-fold greater potency as an inhibitor of chemokine-induced migration [Leu4Ile11 peptide 3 (1-12)]. Furthermore, unlike peptide 3, which binds to the Duffy antigen receptor for chemokines on human erythrocytes with a similar affinity to the specific chemokine receptors on THP-1 cells, the Leu4Ile11 peptide 3 (1-12) sequence variant shows at least 20-fold greater selectivity for the specific receptors. Derivatives of Leu4Ile11 peptide 3 (1-12) are therefore the best candidates among the molecules we have investigated for use as a chemokine inhibitor in vivo.

ANSWER 12 OF 19 USPATFULL

ACCESSION NUMBER: 1998:33576 USPATFULL

Hematopoietic cells: compositions and methods TITLE:

Taichman, Russell S., Ann Arbor, MI, United States INVENTOR(S): Emerson, Stephen G., Wayne, PA, United States The Regent of the University of Michigan, Ann Arbor, PATENT ASSIGNEE(S): MI, United States (U.S. corporation) DATE NUMBER _____ US 5733541 19980331 PATENT INFORMATION: US 1995-426792 19950421 APPLICATION INFO.: DOCUMENT TYPE: Utility Chambers, Jasemine C. PRIMARY EXAMINER: Clark, Deborah J. R. ASSISTANT EXAMINER: Arnold, White & Durkee LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: 41 1 EXEMPLARY CLAIM: 3768 LINE COUNT: CAS INDEXING IS AVAILABLE FOR THIS PATENT. TABLE 3 SUMM CYTOKINES Angiogenin Chemokines C10 Epithelial Neuturophil Activating Peptide-78 (ENA-78) Growth Related (GRO)-.alpha. GRO-.alpha. GRO-.beta. GRO-gamma Macrophage Inhibitory Protein-1 (MIP-1) MIP-1.alpha. MIP-1.beta. Monocyte Chemoatractant Protein-1 2 and 3 (MCP) Regulated upon Activation Normal T-cell Expressed and Secreted (RANTES) Interleukin-8 (IL-8) Epidermal Growth Factors (EGF) Amphiregulin (AR) Beta-Cellulin Epidermal Growth Factor (EGF) Heparin Binding-EGF TGF-.alpha. Fibroblast Growth Factors (aFGF) Acidic FIbroblast. . . (No other Name that I am aware of) Insulin Like Growth Factors-I and II (IGF-I and II) Interferons (IFN) IFN-Alpha IFN-Beta IFN-Gamma Interleukins Interleukin-1 alpha Interleukin-1 beta Interleukin-2 Interleukin-3 Interleukin-5

Interleukins
Interleukin-1 alpha
Interleukin-2
Interleukin-3
Interleukin-5
Interleukin-6
Interleukin-7
Interleukin-9
Interleukin-10
Interleukin-11
Interleukin-12
Interleukin-13
Latency Associated Peptide (LAP)
Leukemia Inhibitory Factor (LIF)
Macrophage Colony Stimulating Factor (M-CSF)

.beta.-Nerve Oncostatin-M (OSM) Osteoclast-Colony Stimulating Factor Platelet Derived Growth Factors Alpha & Beta Heterodimers and Homodimers (PDGF) Pleiokine Family Pleiotrophin Midkine Secretory Leukocyte Protease Inhibitor Stem Cell Factor (SCF or c-Kit Ligand) Transforming Growth Factor Beta Factors (TGF-Beta) TGF-.beta..sub.1 Through TGF-.beta..sub.2 Thromobopoietin Tumor Necrosis Factors (TNF's) TNF-.alpha. TNF-.beta. (Lymphotoxin) Vascular Endothelial Growth Factor VEGE Placenta. . .

DUPLICATE 4 ANSWER 13 OF 19 MEDLINE 1.3

MEDLINE 1999003150 ACCESSION NUMBER:

99003150 DOCUMENT NUMBER:

Helicobacter pylori lipopolysaccharide binds to CD14 and TITLE:

stimulates release of interleukin-8, epithelial

neutrophil-activating peptide 78, and monocyte chemotactic

protein 1 by human monocytes.

Bliss C M Jr; Golenbock D T; Keates S; Linevsky J K; Kelly AUTHOR:

C P

Section of Gastroenterology, Boston Medical Center, Boston CORPORATE SOURCE:

University School of Medicine, Boston, Massachusetts

02118, USA.

DK54920 (NIDDK) CONTRACT NUMBER:

DK02128 (NIDDK) GM54060 (NIGMS)

INFECTION AND IMMUNITY, (1998 Nov) 66 (11) 5357-63. SOURCE:

Journal code: GO7. ISSN: 0019-9567.

United States PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

Priority Journals; Cancer Journals FILE SEGMENT:

199901 ENTRY MONTH: 19990104 ENTRY WEEK:

. . . by leukocyte infiltration of the gastric mucosa. The aims of AΒ

this

study were to determine whether H. pylori-derived factors stimulate chemokine release from human monocytes and to ascertain whether H. pylori lipopolysaccharide (LPS) may be responsible for this effect. Human peripheral. . . blood monocytes were exposed to an H. pylori water extract (HPE) or to purified H. pylori LPS. Levels of the chemokines interleukin-8 (IL-8), epithelial neutrophil-activating peptide 78 (ENA-78), and monocyte chemotactic protein 1 (MCP-1) were measured by enzyme-linked immunosorbent assay. The contribution of H. pylori LPS to monocyte activation was determined by using the. . . sphaeroides lipid A (RSLA) and a blocking monoclonal antibody to CD14 (60bca). HPE increased monocyte secretion of IL-8, ENA-78, and MCP-1. Heat treatment of HPE did not reduce its ability to activate monocytes. Purified H. pylori LPS also stimulated monocyte chemokine production but was 1,000-fold less potent than Salmonella minnesota lipid A. RSLA blocked H. pylori LPS-induced monocyte IL-8 release in. . . (by 88%, P < 0.01), whereas the nonblocking anti-CD14 monoclonal antibody did not. These experiments with potent and specific LPS inhibitors indicate that the main monocyte-stimulating factor in HPE is LPS. H. pylori LPS, acting through CD14, stimulates human monocytes to release the neutrophil-activating

chemokines IL-8 and ENA-78 and the monocyte-activating chemokine MCP-1. Despite its low relative potency, H. pylori LPS may play an important role in the pathogenesis of H. pylori gastritis.

DUPLICATE 5 ANSWER 14 OF 19 MEDLINE L3

MEDLINE 1998129353 ACCESSION NUMBER:

98129353 DOCUMENT NUMBER:

RANTES activation of phospholipase D in Jurkat T cells: TITLE:

requirement of GTP-binding proteins ARF and RhoA.

Bacon K B; Schall T J; Dairaghi D J AUTHOR:

Department of Immunobiology, DNAX Research Institute, Palo CORPORATE SOURCE:

Alto, CA 94304, USA.. Kbacon@neurocrine.com

JOURNAL OF IMMUNOLOGY, (1998 Feb 15) 160 (4) 1894-900. SOURCE:

Journal code: IFB. ISSN: 0022-1767.

United States PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

Abridged Index Medicus Journals; Priority Journals; Cancer FILE SEGMENT:

Journals

199804 ENTRY MONTH:

The chemokine RANTES is a potent agonist of T cell activation. In an investigation of signal-transduction events activated by this chemokine, we have shown that RANTES stimulates dose-dependent phospholipase D (PLD) activity in Jurkat cells. Equilibrium-binding analyses using 125I-labeled RANTES indicated. . . approximately 600 sites per cell, and a binding specificity that was not comparable with that of any of the known chemokine receptors, since 125I-labeled RANTES was displaced by macrophage-inflammatory protein-1 beta (but not macrophage-inflammatory protein-1 alpha), monocyte-chemotactic protein-1

MCP-1), MCP-3, MCP-4, and eotaxin. RANTES-induced PLD activation was augmented by GTP gamma S, but not GDP beta S, and inhibited by the protein kinase C inhibitor bisindolylmaleimide, as well as the fungal metabolite brefeldin A, and C3 exoenzyme (Clostridium botulinum), implicating the activation of RhoA. RANTES. . . immunoprecipitated RhoA. RANTES-stimulated PLD activity

was

(

dependent on an ADP-ribosylation factor(s), as assessed by inhibition studies using a synthetic inhibitory peptide of the N-terminal 16 amino acids of ADP-ribosylation factor 1. These studies indicate the potential existence of a novel receptor-mediated mechanism for activation of T cells by the chemokine RANTES.

ANSWER 15 OF 19 MEDLINE

MEDLINE 97272158 ACCESSION NUMBER:

97272158 DOCUMENT NUMBER:

Human glomerular mesangial cell phagocytosis of apoptotic TITLE:

neutrophils: mediation by a novel CD36-independent

vitronectin receptor/thrombospondin recognition mechanism

that is uncoupled from chemokine secretion.

Hughes J; Liu Y; Van Damme J; Savill J AUTHOR:

Department of Medicine, University Hospital, Nottingham, CORPORATE SOURCE:

United Kingdom.. jeremy.hughes@nottingham.ac.uk

JOURNAL OF IMMUNOLOGY, (1997 May 1) 158 (9) 4389-97. SOURCE:

Journal code: IFB. ISSN: 0022-1767.

United States PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

Abridged Index Medicus Journals; Priority Journals; Cancer FILE SEGMENT:

Journals

199707 ENTRY MONTH:

. . . from inflamed glomeruli, thereby promoting resolution of glomerulonephritis. Mesangial cell phagocytosis of apoptotic neutrophils in vitro was not affected by inhibitors of lectin-like receptors, phosphatidylserine receptors, the 61D3 Ag, and betal and beta2 integrins, receptors which have been implicated in phagocytosis. apoptotic cells by particular populations of semiprofessional and professional phagocytes. However, the specific inhibitory effects of cationic aminosugars, Arg-Gly-Asp-Ser (RGDS) peptide, and mAbs to phagocyte alpha(v)beta3 vitronectin receptor integrin and "bridging" thrombospondin 1 (TSP1) indicated that mesangial cell phagocytosis of apoptotic. . . and sulfatides. Nevertheless, phagocytosis of apoptotic neutrophils by either mesangial cells or Mphi failed to elicit secretion of IL-8 and MCP-1, representatives of each major class of proinflammatory chemotactic cytokines. We conclude that mesangial cell phagocytosis of apoptotic neutrophils involves a novel CD36-independent, alpha(v)beta3/TSP-mediated mechanism that is uncoupled from chemokine secretion, emphasizing the injury-limiting potential of mesangial cell phagocytosis of apoptotic cells.

ANSWER 16 OF 19 MEDLINE

DUPLICATE 6

ACCESSION NUMBER:

MEDLINE 97101427

DOCUMENT NUMBER:

97101427

TITLE:

Endogenous modulators of TNF and IL-1 response are under

partial control of TNF in baboon bacteremia.

AUTHOR:

Redl H; Schlag G; Paul E; Bahrami S; Buurman W A; Strieter

R M; Kunkel S L; Davies J; Foulkes R

CORPORATE SOURCE:

Ludwig Boltzmann Institute for Experimental and Clinical

Traumatology, Vienna, Austria.

SOURCE:

AMERICAN JOURNAL OF PHYSIOLOGY, (1996 Nov) 271 (5 Pt 2)

Journal code: 3U8. ISSN: 0002-9513.

PUB. COUNTRY:

United States

Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

199703

ENTRY WEEK:

19970302 Tumor necrosis factor (TNF) and interleukin (IL)-1 are two cytokines for

which naturally occurring inhibitors have been identified. The present study was undertaken to evaluate the extent to which scavenging

of

TNF in bacteremia attenuates. . . and TNF and was significantly attenuated by anti-TNF treatment, as were the circulating levels of IL-1, IL-8, and monocyte chemotactic peptide-1 (MCP-1) in the anti-TNF Ab group. We conclude that the increase in circulating natural cytokine modulators observed in nonhuman primate bacteremia.

of endogenous TNF because it was influenced by anti-TNF pretreatment.

This

attenuation is comparable to the anti-TNF effect on the chemokine MCP-1.

ANSWER 17 OF 19 MEDLINE

DUPLICATE 7

ACCESSION NUMBER: 96003442

MEDLINE

DOCUMENT NUMBER:

96003442

TITLE:

Serum amyloid A induces calcium mobilization and

chemotaxis

of human monocytes by activating a pertussis

toxin-sensitive signaling pathway.

AUTHOR:

Badolato R; Johnston J A; Wang J M; McVicar D; Xu L L;

Oppenheim J J; Kelvin D J

CORPORATE SOURCE:

Biologic Carcinogenesis and Development Program, Program

Resources, Inc./Dyncorp, Frederick, MD, USA.

SOURCE:

JOURNAL OF IMMUNOLOGY, (1995 Oct 15) 155 (8) 4004-10.

Journal code: IFB. ISSN: 0022-1767.

PUB. COUNTRY:

United States

Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

FILE SEGMENT:

Abridged Index Medicus Journals; Priority Journals; Cancer

Journals

199601 ENTRY MONTH:

mechanism of SAA signaling is unknown, we have investigated the possibility that SAA, like other chemoattractants such as the chemotactic peptide FMLP and chemokines, might induce migration of monocytes by G protein activation. We report here that preincubation of monocytes with pertussis toxin (PTx) inhibited SAA chemotaxis, while incubation with cholera toxin (CTx) did not. Staurosporine and H-7, both incubations of protein kinase C (PKC), significantly decreased rSAA-induced chemotaxis of monocytes, suggesting that PKC may be involved . . by rSAA, was comparable to that elicited by FMLP, and was severalfold greater than that induced by optimal concentrations of chemokine beta-family members such as RANTES, MCAF/MCP
-1, and MIP-1 alpha. The chemoattractants FMLP, RANTES, MIP-1 alpha, and MCAF/MCP-1, all failed to desensitize rSAA-induced Ca2+ influx and chemotaxis in monocytes. This suggests that SAA uses a distinct receptor that.

DUPLICATE 8 ANSWER 18 OF 19 MEDLINE

MEDLINE ACCESSION NUMBER: 96163236

96163236 DOCUMENT NUMBER:

Interleukin-1-induced IL-8 and IL-6 gene expression and TITLE:

production in human mesangial cells is differentially

regulated by cAMP.

Robson R L; Westwick J; Brown Z AUTHOR:

Department of Pharmacology, University of Bath, Avon, CORPORATE SOURCE:

England, United Kingdom.

KIDNEY INTERNATIONAL, (1995 Dec) 48 (6) 1767-77. SOURCE:

Journal code: KVB. ISSN: 0085-2538.

United States PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

Priority Journals FILE SEGMENT:

ENTRY MONTH:

. . . the initiation and propagation of inflammatory events within the glomerulus via the generation of the mesangioproliferative cytokine IL-6 and the chemokines IL-8 and MCP-1. The objective of this study was to investigate the role of cAMP in the regulation of IL-6 and IL-8 gene expression and peptide production in IL-1 stimulated human MC. Agents known to elevate cAMP, including dibutyryl cAMP (db-cAMP), forskolin or isobutyl-methylxanthine (IBMX) were. the presence of IL-1, all three agents produced a marked potentiation of IL-6 mRNA expression and dose-dependent increase in IL-6 peptide production (twofold), but had little or no effect on IL-8 mRNA expression or **peptide** generation. In marked contrast cholera toxin (CT) caused a dose-dependent potentiation of both IL-1-induced IL-6 (approximately fourfold) and IL-8 peptide (approximately twofold) generation. The control agent, the purified binding subunit of cholera toxin (CT-B) which is devoid of ADP-ribosylating activity also enhanced IL-6 and IL-8 (approximately twofold) peptide

generation indicating cAMP-independent mechanisms may be involved in the CT up-regulation of these cytokines. Treatment of MC with the

cycloxygenase inhibitor indomethacin resulted in partial inhibition (37%) of IL-6 production but had no effect on IL-8 generation.

Thus our data show.

DUPLICATE 9 ANSWER 19 OF 19 MEDLINE

MEDLINE 96003901 ACCESSION NUMBER:

96003901 DOCUMENT NUMBER:

The protein phosphatase inhibitor calyculin A stimulates TITLE:

chemokine production by human synovial cells.

Jordan N J; Watson M L; Westwick J

Department of Pharmacology, University of Bath, Claverton AUTHOR: CORPORATE SOURCE:

Down, U.K.

BIOCHEMICAL JOURNAL, (1995 Oct 1) 311 (Pt 1) 89-95. SOURCE:

Journal code: 9YO. ISSN: 0264-6021.

ENGLAND: United Kingdom PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

Priority Journals; Cancer Journals FILE SEGMENT:

199601 ENTRY MONTH:

Cultured human synovial fibroblasts express mRNA for the chemotactic cytokines (chemokines) interleukin-8 (IL-8), monocyte chemotactic protein 1 (MCP-1) and regulated upon activation

normal T-cell expressed and presumably secreted (RANTES), when stimulated with IL-1 or tumour necrosis factor alpha (TNF alpha). Calyculin A, a potent type 1/2A protein serine/threonine phosphatase inhibitor, was used to examine the role of protein phosphatases in the regulation of

chemokine gene expression. Calyculin A (1 nM) mimicked IL-1 by inducing IL-8 and MCP-1 mRNA expression in synovial cells. IL-8

mRNA was induced over a similar time period $(1-6\ h)$ in response to IL-1

or calyculin A, whereas MCP-1 mRNA was induced more rapidly (1-2 h) by calyculin A than by IL-1 (4-6 h). Expression of RANTES mRNA occurred. . of protein phosphatase type 1/2A may have a differential role in

regulation of the expression of each of the chemokine genes. Synovial fibroblasts also secreted IL-8 and IL-6 peptide when stimulated with either IL-1/TNF alpha or calyculin A. The amount of IL-8 and IL-6 peptide produced in response to calyculin A was significantly increased above that produced by untreated synovial cells, though it was much. . . acted synergistically with IL-1 or TNF alpha

cause a 2-fold potentiation of IL-1- or TNF alpha-induced IL-8 mRNA and peptide and RANTES mRNA expression. These results suggest that although inhibition of a protein phosphatase may be able to regulate the magnitude of IL-1-induced chemokine gene expression, the IL-1 signal transduction pathway involves components in addition to

phosphatase inhibition, possibly including the activation of a.

=> s chemokine (s) peptide (s) inhibitor (s) mcp (s) treatment

10 CHEMOKINE (S) PEPTIDE (S) INHIBITOR (S) MCP (S) TREATMENT

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ANSWER 1 OF 4 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.

2000362900 EMBASE ACCESSION NUMBER:

Protective effect of Rolipram in experimental autoimmune TITLE:

neuritis: Protection is associated with down-regulation of

IFN-.gamma. and inflammatory chemokines as well as up-regulation of IL-4 in peripheral nervous system.

Abbas N.; Zou L.-P.; Pelidou S.-H.; Winblad B.; Zhu J. J. Zhu, Division of Geriatric Medicine (B84), Karolinska AUTHOR: CORPORATE SOURCE:

Institute, Huddinge Hospital, S-141 86 Huddinge, Sweden.

Jie.Zhu@neurotec.ki.se

Autoimmunity, (2000) 32/2 (93-99). SOURCE:

Refs: 26

ISSN: 0891-6934 CODEN: AUIMEI

United Kingdom COUNTRY: Journal; Article DOCUMENT TYPE: Pharmacology 030 FILE SEGMENT:

037 Drug Literature Index Neurology and Neurosurgery 800

Immunology, Serology and Transplantation 026

LANGUAGE: English SUMMARY LANGUAGE: English

Rolipram, a phosphodiesterase type 4 inhibitor, is reported to have anti-inflammatory effects. It can markedly downregulate antigen-driven T cell proliferation and suppress TNF-.alpha. and TNF-.beta. production in vitro and in vivo, which have led to its use in the treatment of a number of autoimmune disorders including experimental autoimmune encephalomyelitis (EAE) and experimental autoimmune neuritis (EAN). EAN is a CD4+. . . IFN-.gamma. and TNF-.alpha. production. Here we report that EAN induced in Lewis rats by inoculation with the PNS P2 protein peptide 57-81 and Freund's complete adjuvant (FCA), was strongly suppressed by Rolipram administered twice daily intraperitoneally from day 9 post immunization. . . of clinical EAN to day 18 p.i. This clinical effect was associated with dose-dependent down-regulated production of IFN-.gamma. and the chemokines macrophage inflammatory protein-1.alpha. (MIP-1.alpha.), MIP-2 and monocyte chemotactic protein-1 (MCP-1) as well as up-regulated IL-4 production in sciatic nerve sections from Rolipram-treated EAN rats at maximum of clinical EAN, i.e.. cell-dependent autoimmune diseases and inflammatory neuropathies. These observations call for further studies on the potential role of Rolipram in

the treatment of autoimmune diseases.

L5 ANSWER 2 OF 4 MEDLINE DUPLICATE 1

ACCESSION NUMBER: 1999003150 MEDLINE

DOCUMENT NUMBER: 99003150

TITLE: Helicobacter pylori lipopolysaccharide binds to CD14 and

stimulates release of interleukin-8, epithelial

neutrophil-activating peptide 78, and monocyte chemotactic

protein 1 by human monocytes.

AUTHOR: Bliss C M Jr; Golenbock D T; Keates S; Linevsky J K; Kelly

C P

CORPORATE SOURCE: Section of Gastroenterology, Boston Medical Center, Boston

University School of Medicine, Boston, Massachusetts

02118,

USA.

CONTRACT NUMBER: DK54920 (NIDDK)

DK02128 (NIDDK) GM54060 (NIGMS)

SOURCE: INFECTION AND IMMUNITY, (1998 Nov) 66 (11) 5357-63.

Journal code: GO7. ISSN: 0019-9567.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals; Cancer Journals

ENTRY MONTH: 199901 ENTRY WEEK: 19990104

AB . . . by leukocyte infiltration of the gastric mucosa. The aims of

this

study were to determine whether H. pylori-derived factors stimulate chemokine release from human monocytes and to ascertain whether H. pylori lipopolysaccharide (LPS) may be responsible for this effect. Human peripheral. . . blood monocytes were exposed to an H. pylori water extract (HPE) or to purified H. pylori LPS. Levels of the chemokines interleukin-8 (IL-8), epithelial neutrophil-activating peptide 78 (ENA-78), and monocyte chemotactic protein 1 (MCP-1) were measured by enzyme-linked immunosorbent assay. The contribution of H. pylori LPS to monocyte activation was determined by . sphaeroides lipid A (RSLA) and a blocking monoclonal antibody to CD14 (60bca). HPE increased monocyte secretion of IL-8, ENA-78, and MCP-1. Heat treatment of HPE did not reduce its ability to activate monocytes. Purified H. pylori LPS also stimulated monocyte chemokine production but was 1,000-fold less potent than Salmonella minnesota lipid A. RSLA blocked H. pylori LPS-induced monocyte IL-8 release in. . . (by 88%, P < 0.01), whereas

the nonblocking anti-CD14 monoclonal antibody did not. These experiments with potent and specific LPS inhibitors indicate that the main monocyte-stimulating factor in HPE is LPS. H. pylori LPS, acting through CD14, stimulates human monocytes to release the neutrophil-activating chemokines IL-8 and ENA-78 and the monocyte-activating chemokine MCP-1. Despite its low relative potency, H. pylori LPS may play an important role in the pathogenesis of H. pylori gastritis.

ANSWER 3 OF 4 MEDLINE

DUPLICATE 2

ACCESSION NUMBER:

97101427

MEDLINE

DOCUMENT NUMBER:

97101427

TITLE:

Endogenous modulators of TNF and IL-1 response are under

partial control of TNF in baboon bacteremia.

AUTHOR:

Redl H; Schlag G; Paul E; Bahrami S; Buurman W A; Strieter

R M; Kunkel S L; Davies J; Foulkes R

CORPORATE SOURCE:

Ludwig Boltzmann Institute for Experimental and Clinical

Traumatology, Vienna, Austria.

SOURCE:

AMERICAN JOURNAL OF PHYSIOLOGY, (1996 Nov) 271 (5 Pt 2)

R1193-8.

Journal code: 3U8. ISSN: 0002-9513.

PUB. COUNTRY:

United States

Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

199703

ENTRY WEEK:

19970302

Tumor necrosis factor (TNF) and interleukin (IL)-1 are two cytokines for which naturally occurring inhibitors have been identified. The

present study was undertaken to evaluate the extent to which scavenging

of

TNF in bacteremia attenuates. . . 10(9) colony-forming units/kg live Escherichia coli over 2 h and were subjected to either placebo or

antibody (anti-TNF Ab) treatment (1 mg/kg CDP571, Celltech, UK) 2 h before E. coli infusion (observation time: 72h). IL-1ra (range:

50-100 ng/ml) and sTNFR. . . 75 kDa, 30-35 ng/ml) release was more sustained than that of IL-1 and TNF and was significantly attenuated by anti-TNF treatment, as were the circulating levels of IL-1, IL-8, and monocyte chemotactic peptide-1 (MCP-1) in the anti-TNF Ab group. We conclude that the increase in circulating natural cytokine modulators observed in nonhuman primate bacteremia. . . of endogenous TNF because it was influenced by anti-TNF pretreatment. This attenuation is comparable to the anti-TNF effect on the chemokine

MCP-1.

ANSWER 4 OF 4 MEDLINE

DUPLICATE 3

ACCESSION NUMBER:

96163236 MEDLINE

DOCUMENT NUMBER:

96163236

TITLE:

Interleukin-1-induced IL-8 and IL-6 gene expression and production in human mesangial cells is differentially

regulated by cAMP.

AUTHOR:

Robson R L; Westwick J; Brown Z

CORPORATE SOURCE:

Department of Pharmacology, University of Bath, Avon,

England, United Kingdom.

SOURCE:

KIDNEY INTERNATIONAL, (1995 Dec) 48 (6) 1767-77.

Journal code: KVB. ISSN: 0085-2538.

PUB. COUNTRY:

United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals '

ENTRY MONTH:

199605

. . . the initiation and propagation of inflammatory events within the glomerulus via the generation of the mesangioproliferative cytokine IL-6 and the chemokines IL-8 and MCP-1. The objective of

this study was to investigate the role of cAMP in the regulation of IL-6 and IL-8 gene expression and $\ensuremath{\text{\textbf{peptide}}}$ production in IL-1 stimulated human MC. Agents known to elevate cAMP, including dibutyryl cAMP (db-cAMP), forskolin or isobutyl-methylxanthine (IBMX) were. . the presence of IL-1, all three agents produced a marked potentiation of IL-6 mRNA expression and dose-dependent increase in IL-6 peptide production (twofold), but had little or no effect on IL-8 mRNA expression or peptide generation. In marked contrast cholera toxin (CT) caused a dose-dependent potentiation of both IL-1-induced IL-6 (approximately fourfold) and IL-8 peptide (approximately twofold) generation. The control agent, the purified binding subunit of cholera toxin (CT-B) which is devoid of ADP-ribosylating activity also enhanced IL-6 and IL-8 (approximately twofold) peptide generation indicating cAMP-independent mechanisms may be involved in the CT up-regulation of these cytokines. Treatment of MC with the cycloxygenase inhibitor indomethacin resulted in partial inhibition (37%) of IL-6 production but had no effect on IL-8 generation. Thus our data show. . .

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